

Claims

1. A method for conveying material, advantageously food-industry bulk
5 material, especially cutting offals or food waste, by means of a pressure
difference in a conveying pipe (4), in which method the material is fed
to a conveying pipe (4), and further in the conveying pipe to a
separator device (5) in which the transferred material is separated from
10 conveying air, in which method underpressure is achieved to the
conveying pipe (4) with an ejector apparatus (6) the suction side of
which is connected to the separator device (5), which ejector apparatus
is operated with an actuating medium, characterised in that to
the ejector apparatus (6) is brought a second medium, especially a
liquidous and/or gaseous medium.

15

2. A method according to claim 1, characterised in that the
second medium is brought to the ejector apparatus (6) along with the
actuating medium.
- 20 3. A method according to claim 1 or 2, characterised in that the
second medium is brought regardless of the actuating medium.

25 4. A method according to any one of claims 1-3, characterised
in that the proportion of the second medium and the actuating medium
is regulated if required.

5. A method according to any one of claims 1-4, characterised
in that the second medium is sprayed to the ejector device.
- 30 6. A method according to any one of claims 1-5, characterised
in that the second medium is sprayed to the ejector device (6) before
the mixing of the gases coming from the suction pipe (7) with the
actuating medium of the ejector.
- 35 7. A method according to any one of claims 1-6, characterised
in that the second medium is sprayed to the ejector device (6) during

the mixing of the gases of the suction pipe (7) with the actuating medium or after it.

8. A method according to any one of claims 1–7, characterised in that at least a major part of the second medium is separated from the gas flow.

9. A method according to any one of claims 1–8, characterised in that odour and/or particle nuisances are eliminated and/or the suction effect of the ejector apparatus is intensified by bringing the second medium.

10. A method according to any one of claims 1–9, characterised in that as the second medium is utilised a liquidous medium, especially water.

11. A method according to any one of claims 1–10, characterised in that as the actuating medium is utilised mainly a gaseous medium, such as pressurised air.

20 12. A method according to any one of claims 1–10, characterised in that as the actuating medium is utilised a liquid-bearing medium, such as water mist.

25 13. An apparatus for conveying material, advantageously food-industry bulk material, especially cutting offals and food waste, by means of a pressure difference in a conveying pipe (4), which apparatus comprises a conveying pipe (4) for the material, a separator device (5), and a means for achieving underpressure to the conveying pipe (4) with an
30 ejector apparatus (6) the suction side of which is connected to the separator device (5), which ejector apparatus is operated with an actuating medium, characterised in that the apparatus comprises a means (30) for feeding a second medium, advantageously a liquidous and/or gaseous medium, especially water, to the ejector
35 apparatus (6).

14. An apparatus according to claim 13, characterised in that the means for bringing the second medium comprises at least one nozzle (30).
- 5 15. An apparatus according to claim 13 or 14, characterised in that the means for bringing the second medium comprises at least one nozzle (12, 30) from at least one opening of which the second medium is sprayed to the ejector device (6) along with the actuating medium.
- 10 16. An apparatus according to any one of claims 13-15, characterised in that the means for bringing the second medium comprises at least one nozzle (12, 30) from at least one opening of which the second medium is sprayed separately from the actuating medium to the ejector device (6).
- 15 17. An apparatus according to any one of claims 13-16, characterised in that the means for bringing the second medium comprises a pump device (35).
- 20 18. An apparatus according to any one of claims 13-17, characterised in that at least a part of the devices for bringing the second medium is operated with an actuating medium.
- 25 19. An apparatus according to any one of claims 13-18, characterised in that at least one nozzle (30) of the second medium is arranged to the ejector pipe (13) in the vicinity of the mouth of the ejector pipe.
- 30 20. An apparatus according to any one of claims 13-19, characterised in that the nozzle (30) of the second medium is arranged to the ejector pipe (13), advantageously to its wall.
- 35 21. An apparatus according to any one of claims 13-20, characterised in that the apparatus comprises a means (38) for separating liquidous and/or solid matter from the gas flow.

22. An apparatus according to any one of claims 13-21, characterised in that the apparatus comprises an outlet fitting (39) for leading the separated liquid and/or solid matter to a sewer, a separate container (40) or back to the separator device (5).